CAVITY COAXIAL

Bandpass Filter

ZVBP-1200-S+

 50Ω 1150 to 1250 MHz SMA Female

KEY FEATURES

- Low Insertion Loss, 0.6 dB Typ.
- Good Return Loss, 20 dB Typ.
- High Rejection, 100 dB Typ.
- Wide Stopband up to 2800 MHz
- Power Handling 50 Watts

APPLICATIONS

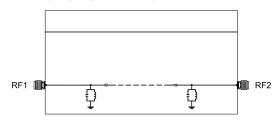
- GPS
- Navigation Systems



PRODUCT OVERVIEW

Mini-Circuits' ZVBP-1200-S+ is a coaxial cavity filter designed by implementing resonant structures with very high Q and are ideal for narrow-band, high-selectivity applications. Mini-Circuits' coaxial cavity filters feature a special protective assembly to prevent accidental de-tuning that would otherwise require expensive replacement or return to factory for re-tuning. Precise machining allows realization of cavity filters with small form factors for applications where size is critical.

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS¹ AT +25°C

| Parameter | | F# | Frequency (MHz) | Min. | Тур. | Max. | Units |
|------------------|------------------|-------|--------------------|------|------|------|-------|
| Passband | Center Frequency | _ | _ | _ | 1200 | _ | MHz |
| | Insertion Loss | F1-F2 | 1150 - 1250 | _ | 0.6 | 1.1 | dB |
| | Return Loss | F1-F2 | 1150 - 1250 | 15 | 20 | _ | dB |
| Stop Band, Lower | Rejection | DC-F3 | DC - 900 | 70 | 100 | _ | dB |
| | | F3-F4 | 900 - 1095 | 50 | 58 | _ | |
| Stop Band, Upper | Rejection | F5-F6 | 1305 - 1500 | 60 | 68 | _ | dB |
| | | F6-F7 | 1500 - 2800 | 70 | 100 | _ | ив |

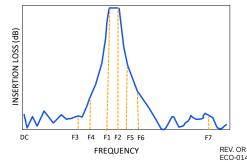
^{1.} This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS^{2,3}

| Parameter | Ratings | | |
|--------------------------|-----------------|--|--|
| Operating Temperature | -40°C to +85°C | | |
| Storage Temperature | -55°C to +100°C | | |
| Input Power ⁴ | 50W at +25°C | | |

- 2. Permanent damage may occur if any of these limits are exceeded.
- 3. Input and output ports are DC short to ground.
- ${\bf 4.\ Power\ rating\ applies\ only\ to\ signals\ within\ the\ passband.}$

TYPICAL FREQUENCY RESPONSE AT +25°C



ECO-014067 ZVBP-1200-S+ EDU4801 URJ 240524



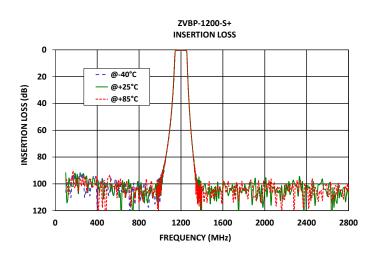


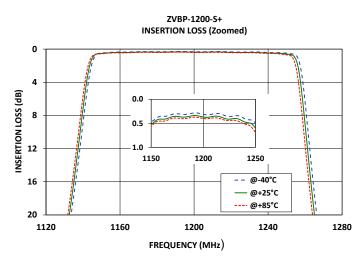
Bandpass Filter

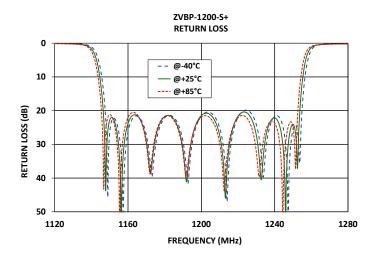
ZVBP-1200-S+

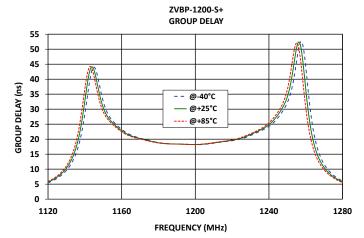
50Ω 1150 to 1250 MHz SMA Female

TYPICAL PERFORMANCE GRAPHS









Bandpass Filter

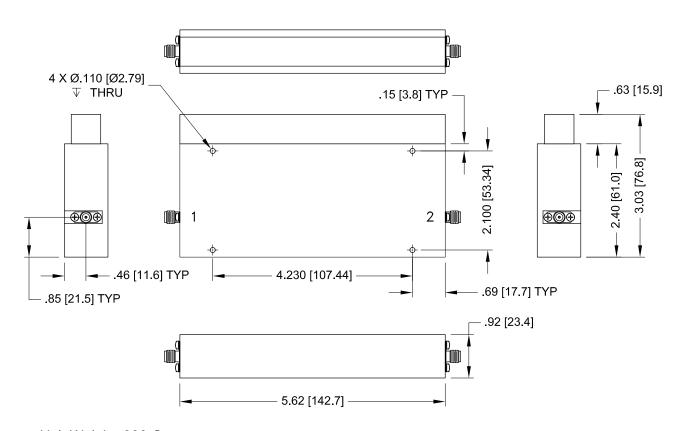
ZVBP-1200-S+

 50Ω 1150 to 1250 MHz SMA Female

CONNECTOR DESCRIPTION

| Function | Marking on Unit | Connector | |
|------------------|-----------------|------------|--|
| RF1 ¹ | 1 | SMA Female | |
| RF2 ¹ | 2 | SMA Female | |

CASE STYLE DRAWING



Unit Weight: 330 Grams.

Dimensions are in inches [mm]. Tolerances: 2 Pl. ± .100; 3 Pl. ± .015

PRODUCT MARKING*: ZVBP-1200-S+

*Marking may contain other features or characters for internal lot control.



Bandpass Filter

ZVBP-1200-S+

 50Ω 1150 to 1250 MHz SMA Female

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

CLICK HERE

| | Data |
|---------------------------|--|
| Performance Data & Graphs | Graphs |
| | S-Parameter (S2P Files) Data Set (.zip file) |
| Case Style | AAH3615 |
| RoHS Status | Compliant |
| Environmental Ratings | ENV77T1 |

NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

